

STRUMIGENYS COCHLEARIS species nov.

Insecta: Hymenoptera: Formicidae:

Myrmicinae: Dacetini

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Pilot Register of Zoology

Card No. 40

Issued 15 November 1988.

Diagnosis, worker: With general characters of the group of *S. godeffroyi* and of an Australian subgroup, but this species and *S. buleru* form together a sub-subgroup characterized by having 3 intercalary denticles in the apical fork and in having rather uniform pilosity of spatulate or inverted spoon-shaped hairs, mostly bent into a subreclinate position parallel to the surface of the integument, without specialized flagelliform or other long hairs in bilateral positions. From *S. buleru*, differing in smaller size, and mandibles longer relative to head size, but slender and slightly curved.

WORKER, HOLOTYPE: TL 3.0, HL 0.70, HW 0.56 (CI 80), ML 0.36 (MI 51), scape L 0.43, eye L 0.07, WL 0.70, petiole L 0.31, post-petiole + gaster L 0.92 mm.

PARATYPES: TL 2.8-3.1, HL 0.66-0.71, HW 0.51-0.59 (CI 73-84), ML 0.34-0.38 (MI 51-55), WL 0.70-0.76 mm.

The workers show no constant differences from *S. buleru* other than those mentioned in the diagnosis above. The alitrunk is more slender in *S. cochlearis*, and in some specimens the posterior mesonotum is distinctly concave, although in some of the material at hand, this part of the notum is so dirty or glue-encumbered that the outline is obscured or altered. As in *S. buleru*, the propodeal teeth are involved to their apices in the infradental lamellae; each lamella is broad, concave in outline just below the uplited tooth, then becoming broadly convex in its ventral half. Postpetiolar disc more shining in some samples than in *buleru*, but this is apparently another variable trait, and one much affected by fouling of the integumental surface. As in *buleru*, the hairs vary somewhat in width and visibility, in

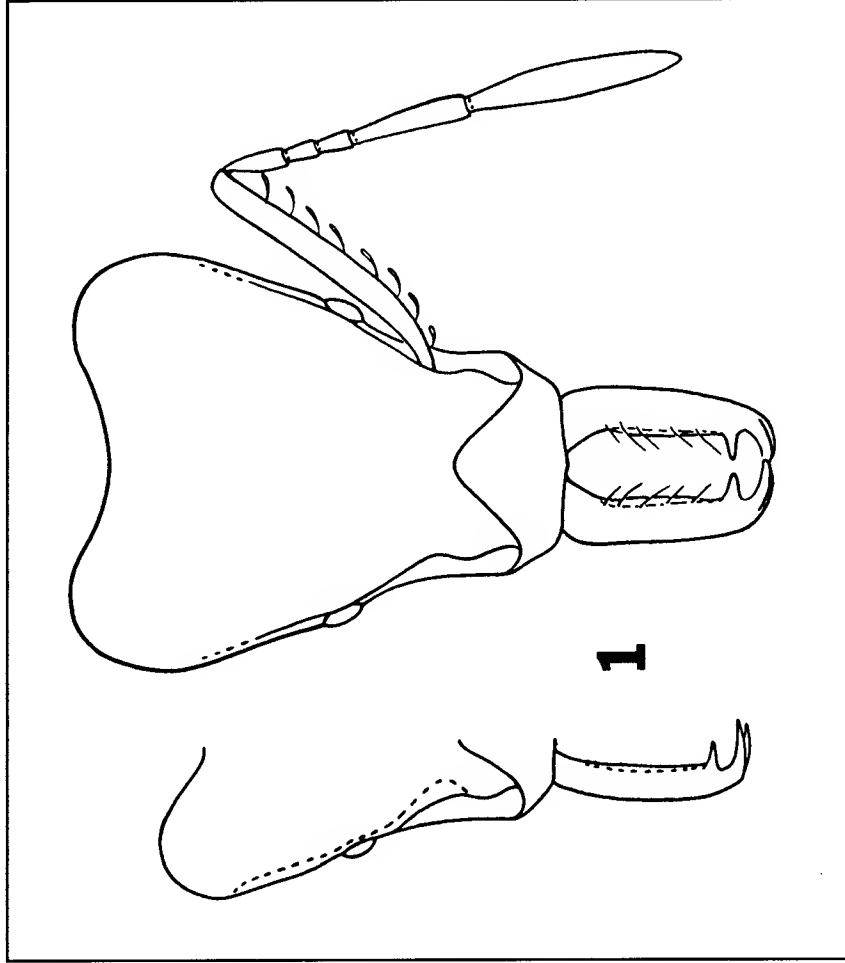


Fig. 1, left, *Strumigenys cochlearis*, worker, half-outline of head and mandibles, pilosity omitted, to compare proportions with *S. bulweri* on the right.

part due to the depth of the integumental background color, so that the sample from Heathcote, Victoria, which is darker ferruginous than more northern material, has cephalic hairs that are conspicuous and seem broader, just as in *buleru* examples from this same Victorian locality.

In general habitus, *S. cochlearis* is similar to *S. quinquedentata* of Western Australia, figured here with *cochlearis*, but close inspection reveals a number of differences, perhaps the most significant of which is the different number of intercalary denticles in the apical fork of the mandible (3 vs. 2), but also including the greater convexity of the dorsolateral cephalic outlines in *quinquedentata*, hiding the eyes from direct full-face dorsal view; the latter species also has fine, prevalently longitudinal rugae superimposed on the reticulate punctulate ground sculpture of the vertexal lobes, and replacing the usual finer sculpture of the same kind over much of the pronotum, continuing caudad over other parts of the notum, while both the notum and the lower pleura have extensive smooth or nearly smooth, shining areas: its propodeal teeth are longer and sharp, subtended by only low, concave, almost cariniform infradental lamellae, and the postpetiolar disc is smaller and more definitely smooth and shining than in *cochlearis*. The principal hairs of the pilosity are individually less strongly enlarged apicad, and generally more delicate than in *cochlearis*, especially the dorsigastric hairs,

which are long and finely flagelliform in *quinquedentata*, but apically enlarged, stiff, and curved caudad in *cochlearis*; lateral vertexal lobes and humeri, without specialized longer hairs in *buleru* and *cochlearis*, have each a long, fine, flagelliform hair in *quinquedentata*, though such hairs are frequently missing in one or more positions due to damage or their adherence to the integument, in which case they are extremely difficult to see, even under good light.

Holotype (MCZ): South Australia: base of Mt. Remarkable, Flinders Range, ca. 400 m, 24 Nov. 1951, leg. W. L. Brown, under rock in open, dry sclerophyll forest. Paratypes (ANIC – Canberra, MCZ, BMNH): South Australia: Gawler, leg. A. M. Lea. "Dimbulah, McDougal, So A, 19.1.34" (I can find no such locality listed in South Australia; a locality named Dimbulah is near Mareeba, in northern Queensland, but Dimboola, western Victoria is a more likely place to find this species.) Victoria: Heathcote, 21 May 1961, leg. B. B. Lowery. New South Wales: Armidale, 1 Sept. 1959, leg. Lowery. From what I know about these localities, all are in the dry sclerophyll zone.

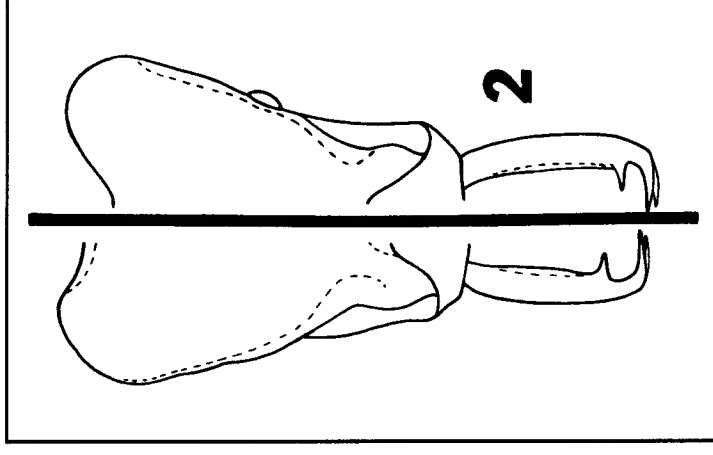


Fig. 2, *S. quinquedentata*, left, to compare half-outline with that of *S. cochlearis* worker, right. Drawings by Susan Poulakis.